Response to Office Action dated July 31, 2008

REMARKS

The Telephone Interview

Examiner Barry is thanked for the courtesy of a telephone interview with the undersigned on July 1, 2008. The Examiner's Interview Summary dated July 3,

2008 is correct. The claims have been amended as suggested in the Interview

Summary except that claims 1 and 2 have not been cancelled. Claims 11-27 have

been made dependent on claim 3.

The Amendments

Claims 1, 3 and 7 have been amended to specify that the concentrated salt solution is a concentrated inorganic salt solution. Support is found at page 7, last

full paragraph. Additional amendments to these claims were made for better

antecedent basis. In addition, claims 3 and 7 have been amended to delete the

term "industrial scale" defining "process" as suggested by the Examiner.

Claim 4 has been amended to correct a typographical error.

Claim 6 has been amended to delete the phrase "of appropriate porosity" as

suggested by the Examiner.

Claims 11-27 have been amended to depend directly or indirectly on claim 3 as

suggested by the Examiner. In addition, claims 13-15 have been amended to

correct typographical errors.

New claim 28, dependent on claim 3, has been added to specify that the process

is an industrial scale process as suggested by the Examiner.

No new matter has been added.

7

Response to Office Action dated July 31, 2008

## The Rejection of Claims 1 and 2 Under Section 102(b)

Claims 1 and 2 have been rejected under Section 102(b) as allegedly anticipated by WO 96/07615. The Office Action states:

WO 96/07615 describes a process for removing DOC from a solution comprising a high concentration of ion exchange resin. As is well known, ion exchange resins comprise ions, thereby making them salts. The ref. also describes contacting the solution with a coagulant and/or flocculant such that the DOC becomes insoluble in the solution. The insoluble DOC is removed from the ion exchange resin-bearing solution.

This rejection is respectfully traversed. This disclosure addresses the problem associated with build-up of large amounts of spent regenerant material (solutions containing salt and DOC) after the regeneration of the ion exchange resins used to remove the DOC from raw water. See page 4, second paragraph. The negatively charged DOC which is bound to the resin is removed through exchange with the regenerant counter ion. The byproduct of this regeneration process is referred to as "spent regenerant." This is the "concentrated inorganic salt solution" referred to in the claims.

The disclosure hereof is directed to treating this "spent regenerant" so that it can itself be regenerated and then used again in a further ion-exchange resin regeneration process. Specifically, the invention is directed to removing DOC (which has been made insoluble by adding a coagulant or flocculant) from the spent regenerant solution. Once the concentrated inorganic salt solution containing dissolved DOC is contacted with a coagulant or flocculant, the DOC aggregates and becomes insoluble. See specification, paragraph bridging pages 8 and 9.

The cited reference does not disclose treating the regenerant solution with flocculant or coagulant to precipitate the DOC from the regenerant solution, which

Response to Office Action dated July 31, 2008

is a concentrated inorganic salt solution. It appears only to disclose using a reverse osmosis membrane (see page 6, last full paragraph of the reference).

It is therefore respectfully submitted that the reference does not teach separating DOC from concentrated inorganic salt solutions. In fact it teaches away from the use of flocculants and coagulants for separation of DOC from raw water (see paragraph bridging pages 1 and 2 of the reference), and as pointed out above, teaches only reverse osmosis membranes for treating concentrated salt regenerant solutions.

In view of the foregoing arguments, withdrawal of the rejection of claims 1 and 2 under Section 102(b) is respectfully requested.

## The Rejections Under Section 112

Claims 1-27 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action states: "In claim 1, the expression "insoluble D[issolved] O[rganic] C[arbon] is confusing for it is unclear whether the organic carbon is insoluble or dissolved." "Insoluble DOC" has an understood meaning in the art. Once the concentrated inorganic salt solution containing dissolved DOC is contacted with a coagulant or flocculant, the DOC aggregates and becomes insoluble. See specification, paragraph bridging pages 8 and 9. It is believed this explanation overcomes the rejection under Section 112, as was indicated in the Examiner's Interview Summary.

## The Rejection of Claims 3-27 under Section 102(b) and 103

Claims 3 and 7 were rejected under Section 102(b) and Claims 4-6 and 8-27 were rejected under Section 103 (per Examiner's Interview Summary) over WO 96/07615. It is submitted that in accordance with the Examiner's Interview

Response to Office Action dated July 31, 2008

Summary, the arguments and amendments adequately overcome the rejections under Section 102(b) as well as the rejections under Section 103.

## Conclusion

In view of the foregoing arguments and amendments, it is submitted this application is in condition for allowance. Passage to issuance is respectfully requested. A claim fee in the amount of \$50 for one additional claim is believed due with this response. In addition a Request for Extension of Time (one month) is submitted herewith, together with the appropriate fee in the amount of \$120. The total amount of \$170 is being paid via the EFS web payment system. If this amount is incorrect, or the EFS system does not successfully deduct payment, please charge any deficiency or any amount required for any further extension of time needed, or credit any overpayment to Deposit Account No. 07-1969.

Respectfully submitted,

/ellenwinner/

Ellen P. Winner Reg. No. 28,547

GREENLEE, WINNER AND SULLIVAN, P.C. 4875 East Pearl Circle, Suite 200 Boulder, CO 80301 Telephone (303) 499-8080 Facsimile: (303) 499-8089 Email: usptomaii@greenwin.com Attorney Docket No.: 109-05